GEOLOGIC MAP OF THE NORTHERN HUALAPAI MOUNTAINS, MOHAVE COUNTY, ARIZONA

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Arizona Geological Survey Contributed Map 04-C (CM-04-C)

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GEOLOGIC UNITS

Qal — **Active alluvium (Holocene)** --- Sands and gravels in active streams and washes derived from all units below. Stream beds and washes not apparently active are classified as the older alluvium and colluvium unit.

Qoa — **Older alluvium and colluvium (Holocene and Pleistocene)** --- Inactive stream channels, washes, and colluvial deposits including alluvial fan and terrace materials. Sediments of this unit range in size from boulders to sand and are derived from all units below.

Tv — **Volcanic rocks (Tertiary)** --- Basalt flows with minor rhyolite flows in places. Includes the Peach Springs tuff in some northerly areas. Areas of volcanic colluvium are included in this unit as well.

Ygr — **Granite (Mesoproterozoic)** --- Megacrystic and leucocratic granitic rocks informally named "Holy Moses Granite". This unit is part of continent-wide 1.4 Ga magmatic event. Locally contains magmatic foliation.

Xog — **Orthogneiss (Paleoproterozoic)** --- Granitic gneiss primarily consisting of K feldspar, plagioclase, quartz, and biotite. Rarely contains hornblende. Contains strong metamorphic foliation, locally developed lineation and some mylonite zones. Contains dikes and veins of pegmatite. Preliminary U/Pb zircon age in this unit is 1717 Ma.

Xgu — **Granite, undifferentiated (Paleoproterozoic)** --- Contains granitic rocks of many different textures and does not resemble any of the other units. Contains a metamorphic foliation and in no area is this unit megacrystic.

Xgr — **Granite (Paleoproterozoic)** --- Medium-grained quartzofeldspathic gneiss with strong metamorphic foliation. Weathered surfaces are generally pink to orange in color. This unit is intruded by narrow veins and dikes of pegmatite and dikes of Mesoproterozoic granite. Also contains xenoliths of migmatitic gneiss in places.

Xam — **Amphibolite (Paleoproterozoic)** --- Consists primarily of fine-grained hornblende and plagioclase and contains weak to moderate metamorphic foliation. This unit is not lineated. Generally exposed in long narrow bodies that can be traced for kilometers. Garnet amphibolite was found in one location.

Xms — **Metasedimentary schist (Paleoproterozoic)** --- Includes psammitic and pelitic schists, amphibolite, and metamorphosed plutonic rocks. Primary rock type is schist containing quartz, K feldspar, plagioclase, biotite, and minor hornblende. Metamorphic foliation ranges from strong to weak. Unit is intruded by veins and elongate bodies of fine-grained to pegmatitic granitic rocks.

Xmg — **Migmatitc gneiss (Paleoproterozoic)** --- Strongly foliated, fine-grained gneiss consisting of quartz, K-feldspar, plagioclase, and biotite. Unit is locally migmatitic with mylonitic zones present as well. Unit is intruded by pegmatite veins and dikes as well as bodies of Mesoproterozoic granite. This unit interfingers with the Paleoproterozoic granite unit at its contact with that unit.

MAP SYMBOLS

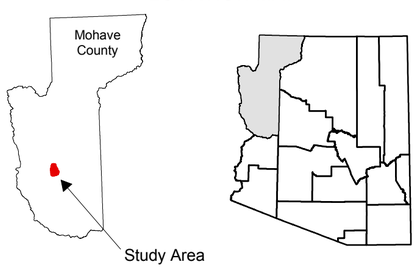
- Contact, accurately located
- Contact, approximately located
- Strike and dip of foliation, inclined
- Strike and dip of foliation, vertical
- Trend and plunge of lineation, inclined
- Trend and plunge of lineation, horizontal
- Overturned antiform
- Synform
- Mylonite zone
- Fault, accurately located
- Fault, approximately located

SCALE 1:24,000

1 0 1 2 Kilometers

1 0 1 Miles

LOCATION MAP



Topographic base from USGS 7½' Kingman and KingmanSE quadrangles. Taken by photogrammetric methods from aerial photographs in 1965; field checked in 1967. Polyconic projection, NAD 1927, UTM grid, zone 11.

114°5'0"W 114°2'30"W 114°0'0"W

35°7'30"N 35°5'0"N 35°2'30"N